# Should BPAT Maintain the Capacity of the Celilo Converter Station? Posted 8/9/2000

#### Introduction

On October 28<sup>th</sup> 1999, the Bonneville Power Administration's Transmission Business Line (BPAT) posted a notice on our Operations and Planning "System News and Studies" web page to inform our customers of a long-term planning study for the Pacific HVDC Intertie (PDCI). The PDCI connects the Pacific Northwest (Celilo Converter Station) with the Los Angeles area (Sylmar Converter Station) by a 1,361-km direct current line. This original notice can be found at:

http://www.transmission.bpa.gov/orgs/opi/system\_news/PDCI\_Study.doc

In this notice, BPAT stated that the study examined two basic alternatives:

- 1. Make additional investment to maintain the PDCl's current rating of 3100 MW for at least 30 years.
- 2. Retire the aging mercury arc valve converters sometime in the future and make some additional investment in the existing thyristor converters to bring the remaining system to a 1650 MW rating.

BPAT explained that the southern participants in the DC Intertie needed to address issues with the earthquake-damaged, aging converter equipment of the southern end of the Intertie. Recently, The Los Angeles Department of Water and Power (LADWP) and Southern California Edison (SCE) have proposed a project to replace the facilities at the Sylmar Converter Station. This replacement project will improve the reliability of southern end of the PDCI for the next 30 years. The project would begin in January 2001 and be completed in December 2003.

#### **Meeting between PDCI owners**

At a July 2000 meeting between BPAT, LADWP and SCE, LADWP and SCE asked BPAT to make a 30-year commitment to maintain the Celilo Converter Station at it's current rating of 3100 MW, as a precondition to moving forward with their project.

The overall capacity of the PDCI is determined by the ratings of the Sylmar and Celilo converter stations. If the capacity of either station is decreased, then the PDCI capacity is decreased as a result.

To maintain 3100 MW for the 30-year commitment, BPAT must make a substantial investment in replacing aging equipment. BPAT must choose between maintaining the present rating of the Celilo converter station or making a smaller investment that would bring the remaining equipment to a 1650 MW rating. BPAT's decision depends on the future use of the Intertie.

## **BPAT Planning Study**

BPAT has not included converter replacements at the Celilo Converter Station in its current capital investment program. The oldest converter equipment, now more than 30 years old, will need to be either replaced or retired. Sometime within the next 15 years, BPAT will need to address this issue.

BPAT has completed a planning study that looked at many different options for the future of the Celilo Converter Station. The options varied from making no investment to complete replacement of all converter equipment.

### **BPA Public Process to Discuss Investment in Celilo Converter Station**

BPAT intends to begin a public process soon to discuss a 30-year commitment to maintain the Celilo Converter Station at its present rating with interested parties.

Questions should be directed to your appropriate Transmission Account Executive.

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